FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Developing a Unified Intercarrier Compensation Regime	)	WC Docket No. 01-92
	)	
	)	

REPLY COMMENTS OF T-MOBILE USA, INC.

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SUMMARY

The record in this proceeding demonstrates widespread support for the FCC's efforts to facilitate the transition to Internet-Protocol based interconnection, networks and services (the "IP Transition"), including the implementation of a national bill-and-keep framework as the ultimate end state for all telecommunications traffic exchanged with any local exchange carrier ("LEC"). Nonetheless, certain incumbent LECs ("ILECs") and other carriers that uniquely benefit from their bottleneck control over portions of the legacy PSTN (together, "Legacy Carriers") urge the FCC to turn the clock back, including, for example, by forcing competitive carriers to directly interconnect with points of interconnection ("POI"s) at the ILEC's central offices. Mandating direct interconnection—or the establishment of POIs at central offices—would unnecessarily raise the cost of entry and force new entrants unnecessarily to replicate existing networks, which is why the law explicitly permits competitive carriers to choose where and how to interconnect. Therefore, the FCC should reject any suggestion that competitive carriers be forced to connect directly or to establish a POI at any central office.

The FCC's guiding principle should be the promotion of the IP Transition, not the preservation of legacy revenue sources and outdated networks for a subset of carriers at the expense of the public interest. Accordingly, T-Mobile joins the majority of parties who urge the FCC to reject any call for actions that would perpetuate the inefficiencies of the current rules and further delay the IP Transition, including: (i) requiring competitive carriers to establish a POI in each ILEC central office; (ii) imposing the full cost of connecting directly to a POI in each of the ILEC's end offices solely on the competitive carrier; and (iii) stopping the transition to bill-and-keep so that ILECs can continue receiving legacy revenue streams. Any one of these actions would serve only to undermine the Commission's pro-competitive goals and further delay the IP Transition.

To facilitate the IP Transition, the FCC should also adopt T-Mobile's Safe Harbor POI Solution. *See* T-Mobile Comments at ii-iii, 10-20 (describing the Safe Harbor POI Solution). The Safe Harbor POI Solution would solve the problems identified in this proceeding while successfully addressing the legitimate concerns of ILECs. The Safe Harbor POI Solution would expedite the IP Transition by eliminating the incentives for certain carriers to obstruct the IP Transition and would eliminate, or at least alleviate, the most common arbitrage schemes that exist under the current rules as well as many call quality problems, particularly in rural areas, by reducing the hops used for terminating calls.

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T-Mobile USA, Inc.[1] ("T-Mobile") hereby submits these reply comments in response to the request by the Federal Communications Commission ("FCC" or "Commission") for comments on ways to reform the intercarrier compensation ("ICC") system for the benefit of the public.[2]

I. The FCC Should Not Further Delay the IP Transition or Undermine Rules that Promote Competition

Those filing initial comments agree that the current rules create incentives for arbitrage and inefficient behaviors that delay the IP Transition.[3] They express widespread support for the FCC's efforts to facilitate the IP Transition, including the implementation of a national bill-and-keep framework as the ultimate end state for all telecommunications traffic exchanged with any LEC.[4] Nonetheless, certain Legacy Carriers now urge the FCC to turn the clock back to the years

[1] T-Mobile USA, Inc. is a wholly-owned subsidiary of T-Mobile US, Inc., a publicly-traded company.

[2] *Parties Asked to Refresh the Record on Intercarrier Compensation Reform Related to the Network Edge, Tandem Switching and Transport, and Transit*, Public Notice, WC Docket No. 10-90; CC Docket No. 01-92; DA 17-863 (rel. Sept. 8, 2017) (the "Notice").

[3] *See, e.g.*, NCTA Comments at 2, 6 ("By eliminating ambiguities in the rules, the Commission can reduce the financial incentives for incumbent LECs to perpetuate these legacy arrangements and encourage them to move toward more efficient IP-based traffic exchange"); Voice on the Net Coalition Comments at 3 ("The Commission should eliminate in all due haste any incentive carriers may have to maintain costly TDM networks and their inefficient per minute charges").

[4] *Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier*

before Congress adopted the Telecommunications Act of 1996 (the "1996 Act") by ordering competitive carriers to establish direct connections to each of the Legacy Carriers' central offices at the sole expense of the competitive carriers.[5]

Requiring competitive carriers to directly interconnect with ILECs at locations that the ILECs have chosen would be fundamentally inconsistent with the letter and the spirit of the law,[6] including the FCC's 2011 decision to comprehensively reform and modernize its intercarrier compensation regime to facilitate the transition to IP-based networks and curtail wasteful arbitrage.[7] To facilitate the expansion of competitive networks and services, Congress gave competitors, not incumbents, the right to determine ***where*** and ***how*** to interconnect. For this reason, the Act "allows *competing carriers to choose the most efficient points* at which to

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Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; Universal Service Reform – Mobility Fund, WC Docket Nos. 10-90, 07-135, 05-337, 03-109; GN Docket No. 09-51; CC Docket Nos. 01-92 and 96-45; WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17904-956, §§ 736-846 (2011) ("*Transformation FNPRM*" or "*Transformation Order*"), *pets. for review denied*, *In re FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014); *see also Technology Transitions* (GN Docket No. 13-5); *Special Access for Price Cap Local Exchange Carriers* (WC Docket No. 05-25); *Policies and Rules Governing Retirement Of Copper Loops by Incumbent Local Exchange Carriers* (RM-11358); *AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services* (RM-10593); *AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition* (GN Docket No. 12-353*); Structure and Practices of the Video Relay Service Program* (CG Docket No. 10-51); *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities* (CG Docket No. 03-123); *Numbering Policies for Modern Communications* (WC Docket No. 13-97) ("*Transformation Order*").

5 *See, e.g.,* CenturyLink Comments at 4, 8; ITTA Comments at 2; Nebraska Rural Independent Companies ("NRIC") Comments at 9-10; Comments of Peerless Network, Inc.; West Telecom Services, LLC; Peninsula Fiber Network, LLC; Alpha Connect, LLC; Rural Telephone Service Company and Tennessee Independent Telecommunications Group, LLC D/B/A Iris Networks (the "Coalition Comments") at 4.

6 *See, e.g., In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, 11 F.C.C. Rcd. 15499 at ¶¶1-3 (1996), *modified*, 1996 WL 557116 (1996), *partially vacated, Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir.1997), *rev'd in part, AT&T v. Iowa Utils. Bd*., 525 U.S. 366, 119 S. Ct. 721, 142 L.Ed.2d 835 (1999) (the "*First Report and Order*") ("In the old regulatory regime, government encouraged monopolies. In the new regulatory regime, we and the states remove the outdated barriers that protect monopolies from competition and affirmatively promote efficient competition using tools forged by Congress. . . . The Act directs us and our state colleagues to remove not only statutory and regulatory impediments to competition, but economic and operational impediments as well. . . . Competition in local exchange and exchange access markets is desirable, not only because of the social and economic benefits competition will bring to consumers of local services, but also because competition eventually will eliminate the ability of an incumbent local exchange carrier to use its control of bottleneck local facilities to impede free market competition.").

7 *See generally Transformation Order*.

exchange traffic with incumbent LECs, thereby lowering the competing carriers' costs of, among other things, transport and termination of traffic."[8]

With respect to ***where*** competitive carriers can establish a POI, it is well-settled that an ILEC must, upon request by a competitive carrier, interconnect with the competitive carrier at the location of the competitive carrier's choice.[9] The sole grounds upon which an ILEC can validly deny a request for interconnection from a competitive carrier is that interconnection at the requested location is not technically feasible.[10] The FCC and the courts also conclusively determined decades ago that "technical feasibility" does not include consideration of economic, accounting, or billing concerns.[11] Therefore, the main reason Legacy Carriers give for requiring competitive carriers to interconnect directly at their end offices—the need to minimize their costs—has been conclusively considered and rejected several times[12] and should be rejected again.

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[8] *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, 11 F.C.C. Rcd. 15499 at ¶172 (1996), *modified*, 1996 WL 557116 (1996), *partially vacated, Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir.1997), *rev'd in part, AT&T v. Iowa Utils. Bd*., 525 U.S. 366, 119 S. Ct. 721, 142 L.Ed.2d 835 (1999) (the "*First Report and Order*")(emphasis added).

[9] *See* 47 U.S.C. § 251(c)(2).

[10] *See, e.g., W. Radio Servs. Co. v. Qwest Corp*., 678 F.3d 970, 982 (9th Cir. 2012) (quoting In re Connect Am. Fund, 26 FCC Rcd. 4554, 4775, ¶ 682 & n.1088, 2011 WL 466775 (2011)) (holding that a connection is technically feasible when CLECs "have the option to interconnect at a single point of interconnection per LATA"); *MCI Telecomm. Corp. v. Bell Atl. Pennsylvania*, 271 F.3d 491, 517 (3d Cir. 2001) (holding the standard should be applied broadly and that the obligation is satisfied when a CLEC takes access "at any point on the incumbent network where connection is technically feasible"). The ILEC seeking to deny a request for interconnection at a point chosen by a competitive carrier would have to "prove to the state commission that interconnection at that point is not technically feasible." 47 C.F.R. § 51.305(e).

[11] *See, e.g.*, 47 C.F.R. §§ 51.5, 51.305(a), 51.321.

[12] For example, in *MCI Telecomm. Corp. v. Bell Atl. Pennsylvania*, 271 F.3d 491 (3d Cir. 2001), the Third Circuit Court of Appeals considered whether an ILEC could direct a competitive carrier to "take access at several additional points in the network, to interconnect at multiple points within the LATA, even if [the CLEC] does not want to do so." *Id.* at 517. The court found that "[t]he decision where to interconnect and where not to interconnect must be left to [the competitive carrier], subject only to concerns of technical feasibility." *Id.* at 518; *see also In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order*, 11 F.C.C. Rcd. 15499 at ¶172 (1996), modified, 1996 WL 557116 (1996), partially vacated, *Iowa Utils. Bd. v. FCC*, 120 F.3d 753 (8th Cir.1997), *rev'd in part, AT&T v. Iowa Utils. Bd.*, 525 U.S. 366, 119 S. Ct. 721, 142 L.Ed.2d 835 (1999) (finding that § 251(c)(2) "allows *competing carriers to choose the most efficient points at which*

With respect to ***how*** competitive carriers interconnect with ILECs, it is well-settled that the Act affords competitive carriers "the choice to interconnect directly or indirectly, and [competitive carriers] can make the decision based upon the most efficient technical and economic choices."[13] The FCC and the courts have repeatedly affirmed that competitive carriers can satisfy their interconnection obligations under the Act with indirect interconnection arrangements,[14] and many carriers interconnect indirectly today and will need to continue to do so during and after the IP Transition.[15]

Forcing competitive carriers to connect directly to POIs in each of the Legacy Carriers' central offices (at the sole expense of the competitive carriers) cannot be reconciled with the requirements of the Act and the FCC's rules, or the pro-competition goals of Congress, the FCC

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to exchange traffic with incumbent LECs, thereby lowering the competing carriers' costs of, among other things, transport and termination of traffic") (emphasis added).

[13] *Iowa Network Servs., Inc. v. Qwest Corp*., 385 F. Supp. 2d 850, 859 (S.D. Iowa 2005) aff'd, 466 F.3d 1091 (8th Cir. 2006); see also *Transformation Order*, ¶1383 n.2513, *citing* PAETEC USF/ICC Transformation NPRM Reply at 11, 12 ("Although section 251(a)(1) requires all telecommunications carriers to interconnect, it permits direct or indirect interconnection."). *First Report and Order*, 11 FCC Rcd. at 16171 at ¶ 1408 ("[w]e decide that competitive telecommunications carriers that have the obligation to interconnect with requesting carriers may choose, based upon their own characteristics, whether to allow direct or indirect interconnection"). Ironically, CenturyLink itself has recently acknowledged that competitive carriers have no obligation to directly interconnect with an ILEC. CenturyLink filed comments in the AT&T Forbearance docket characterizing as "lawful" the indirect interconnect arrangements in place between terminating carriers and interexchange carriers which use intermediate tandem providers to route traffic. *See* CenturyLink Opposition/Comments to AT&T Forbearance Petition, WC Docket No. 16-363 at 4 (filed Dec. 2, 2016).

[14] *First Report and Order*, ¶ 997 ("we find that indirect connection … satisfies a telecommunications carrier's duty to interconnect pursuant to 251(a)" and "direct interconnection . . . is not required under section 251(a)" for competitive carriers); 47 U.S.C. § 251(a) ("General Duty of Telecommunications Carriers. Each telecommunications carrier has the duty (1) to interconnect directly ***or indirectly*** with the facilities and equipment of other telecommunications carriers; …") (emphasis added). *See also, e.g., New Cingular Wireless PCS, LLC v. Finley*, 674 F.3d 225, 231 (4th Cir. 2012); *Transformation Order* at ¶840 ("Thus, in response to a request by an incumbent LEC for interconnection under section 20.11(e), CMRS providers are not required to enter into direct interconnection, and may instead satisfy their obligation to interconnect through indirect arrangements."). This is in contrast to 47 U.S.C. § 251(c), which does impose direct connection obligations on ILECs under certain circumstances.

[15] *See, e.g., Transformation Order*, ¶ 1374, n. 2498; *citing* Sprint July 29, 2011 Ex Parte Letter at 9 ("It is not realistic to believe that all 1,800 to 2,000 networks will connect directly with each other. Rather, as is the case today with PSTN interconnection, in many circumstances it will be more efficient for two networks to interconnect indirectly with each other, using an IP network operated by a third party.").

and the states. It would also move the entire industry backwards by requiring competitive carriers, for the first time, to replicate yesterday's legacy TDM network configurations rather than building more efficient IP-based networks. Mandating direct interconnection—or the establishment of POIs at central offices—would unnecessarily raise the cost of entry and force new entrants unnecessarily to replicate existing networks, which is exactly why the law explicitly permits competitive carriers to choose where and how to interconnect. Therefore, the FCC should reject any suggestion that competitive carriers be forced to connect directly or to establish a POI at any particular central office.

The FCC should also reject claims that transit services are not subject to regulation under the Act.[16] Transit services are a critical component of our nation's networks, and will remain critical throughout the IP Transition. The FCC must retain its authority to regulate transit services as needed to address any marketplace failures. Therefore, the FCC should reaffirm that transit services must be provided at just and reasonable rates pursuant to Section 251(c) of the Act.

II. The FCC Should Act Now to Provide Clarity on Key ICC Issues

The FCC should act quickly to provide clarity on key intercarrier compensation issues. First, most parties agree that the FCC should define the network edge by adopting a default POI which would apply in the absence of agreement between the interconnecting parties.[17] Several

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16 *See, e.g.,* CenturyLink Comments at 12 (". . . while the Commission's authority to impose bill and keep on certain aspects of access and non-access ICC components has been sustained, transition of new components such as the tandem and transport functionality at issue here can not satisfy those standards"); Coalition Comments at 31 (contending that Sections 251 and 252 of the Act do not give the Commission authority to impose TELRIC-based price regulation on transit services).

17 *See, e.g.,* AT&T Comments at 2 (urging the FCC to "adopt a rule establishing a default 'network edge'"); GCI Comments at p. 4 ("In Alaska, the "network edge" should be the terminating LEC's local exchange, unless the LEC designates a different point"); CenturyLink Comments at 3 (encouraging the FCC to establish the end office as the proper default network edge for all providers); Sprint Comments at 2-4 (urging the FCC to adopt a "default rule"

parties also agree with T-Mobile that the network edges or "default POIs" should not be based on the legacy PSTN, but rather on the dictates of the IP Transition.[18]

AT&T, Sprint, and others agree that each interconnecting party should be responsible for the costs of the facilities needed to reach the default POI[19] and that there should be no charge for accepting traffic at that POI.[20] T-Mobile agrees with AT&T and others that the FCC should require each carrier delivering traffic to a default POI (*i.e.*, the network edge) to bear the financial burden for delivering the traffic, and ensure that receiving carriers "are obligated to accept the traffic . . . and may not charge" for accepting and terminating the traffic.[21]

Finally, while there continues to be disagreements regarding where the default POI should be located and whether bill-and-keep should apply to all traffic types, the majority of

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pursuant to which the POI would "presumptively be located at the places where IP network operators currently exchange non-voice traffic," or, as Sprint refers to it, the "IP POI"); Verizon Comments at 13 (encouraging the FCC to adopt AT&T's 2012 edge proposal).

[18] *See, e.g.,* Sprint Comments at 3-4 (explaining that the default POI rule should not be based on "the legacy network framework" since "LATA-based points of interconnection are increasingly irrelevant and indisputably inefficient in an IP world.").

[19] *See, e.g.,* AT&T Comments at 2, 7, 14 (describing carriers' "financial responsibility to deliver traffic to (or from) the edge)"); GCI Comments at 5; Sprint Comments at 4 ("[T]he Commission should make clear that each network operator is responsible for the costs of establishing connections from its network to the IP POI, including any TDM-IP media gateway conversions, ports on its network edge router, port charges on the carrier hotel switch, and any carrier hotel landlord fees for its collocated equipment, or IP transit costs associated with reaching the IP POI if it does not have its own facilities to the IP POI"); Verizon Comments at 13 ("The Commission should design the edge rules so that terminating carriers that insist on indirect interconnection are financially responsible for the cost of transit service.").

[20] *See* AT&T Comments at 2, 7, 14. *See also* GCI Comments at 4 - 5 ("It is logical for the calling customer (or that customer's carrier) to have financial responsibility to deliver traffic to the local exchange serving the called party" and that the "call initiators and cost-causers" should bear financial responsibility). *See also* Verizon Comments at 13 ("Consequently, under AT&T's proposal the sending carrier only bears the financial obligation to deliver traffic to the facilities of the transit provider; the terminating carrier, not the sending carrier, is responsible for the costs of the transit service.").

[21] AT&T Comments at 14.

parties agree that the FCC should act now to resolve these disputed issues, eliminate ambiguity in its rules, and facilitate the IP Transition.[22]

III. Disagreements About How the FCC Should Proceed Generally Reflect the Different Incentives that the Current Rules Create for ILECs and Competitive Carriers

Despite widespread agreement that FCC action is needed, commenters differ on the actions that the FCC should take based on the different incentives that the current rules create for competitive carriers versus Legacy Carriers. While many parties generally support FCC efforts to modernize the ICC rules and to facilitate the IP Transition, Legacy Carriers urge the FCC to turn back the clock,[23] or at least maintain the *status quo*,[24] so they can continue to leverage outdated rules to generate arbitrage revenues. The FCC's guiding principle should be to promote the IP Transition, [25] as opposed to the preservation of legacy revenue sources and outdated

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[22] *See, e.g.,* HD Tandem Comments at 2 ("HD Tandem also agrees with the widespread recognition that the existing geographically-based public switched telephone network ('PSTN'), as we know it, is obsolete and outdated, and the legacy TDM-based network serves as an obstacle to the IP Transition"); Coalition Comments at 13-14 ("Since the issuance of the 2011 USF/ICC Transformation Order, it has become very clear that the Commission needs to address the abuse of existing rules. . . ."); Verizon Comments at 9 ("Although the Commission has already found these mileage pumping schemes are an unreasonable practice that violates section 201(b) of the Act, mileage pumping continues to be the basis of intercarrier disputes"); NCTA Comments at 2 ("By eliminating ambiguities in the rules, the Commission can reduce the financial incentives for incumbent LECs to perpetuate these legacy arrangements and encourage them to move toward more efficient IP-based traffic exchange"); ITTA Comments at 14 ("As CenturyLink argued, the ambiguities surrounding application of the transition rules to the price cap terminating carrier's affiliates 'will lead to fundamental asymmetry in ICC treatment' and, thereby, competitive harm").

[23] *See e.g.* CenturyLink Comments at 3 ("The ideal path forward requires a reversal of the Commission's de facto partial reform to-date of only certain categories of tandem switching and transport.")

[24] *See, e.g.* ITTA Comments at 17 ("In sum, the transit market is competitive, the status of transit under the Section 251 framework is unclear, and a bill-and-keep regime is inappropriate for it. The Commission should decline to regulate transit rates"); NRIC Comments at 2 ("No need exists to alter the access-related tandem switching and transport requirements at this time unless and until the FCC establishes sufficient and predictable recovery mechanisms from the federal Universal Service Fund").

[25] *See* Statement of Commissioner Ajit Pai, *Technology Transitions,* GN Docket No. 13-5; *AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition,* GN Docket No. 12-353; *Connect America Fund,* WC Docket No. 10-90; *Structure and Practices of the Video Relay Service Program,* CG Docket No. 10-51; *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities,* CD Docket No. 03-123; *Numbering Policies for Modern Communications,* WC Docket No. 13-97.

networks for a subset of carriers at the expense of the public interest.[26] T-Mobile joins the loud chorus of those urging the FCC to reject any call for actions that would perpetuate the inefficiencies of the current rules and further delay the IP Transition,[27] including requiring competitive carriers to establish a POI in each ILEC central office as CenturyLink and others have suggested.[28] The FCC should also reject CenturyLink's suggestion to impose the full cost of connecting directly to a POI in each of the ILEC's end offices solely on the competitive carrier[29] and the suggestions to stop the transition to bill-and-keep so that ILECs can continue receiving

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[26] This desire to not upset the apple cart" of implicit subsidies afforded by the legacy ICC rules is often masked in the cloak of preserving "network investment." *See, e.g.*, Coalition Comments at 8 (arguing that "the guiding principle" should be "to ensure that the enormous network investments . . . are not undermined during the overall transition to bill-and-keep").

[27] *See e.g.* Voice On The Net Coalition Comments at 3 ("The Commission should eliminate in all due haste any incentive carriers may have to maintain costly TDM networks and their inefficient per minute charges."); *See also* Verizon Comments at 4 ("As the Commission in 2011 predicted, revenue from high per-minute transport rates gives LECs an incentive to retain a TDM network architecture and can serve as a disincentive to establishing more efficient interconnection arrangements. In our experience, some companies refuse to negotiate more efficient interconnection arrangements, such as direct connections or IP-based interconnections, because they do not want to lose tandem switching and transport revenues").

[28] *See e.g*. CenturyLink Comments at 3 ("The Commission should correct this asymmetry by adopting rules permitting all tandem owners to be compensated equally for the use of their networks – thereby establishing the end office as the proper default network edge for all providers); *see also* ITTA Comments at 4 ("For incumbent LECs, the end office is the last switching point in a call path, the actual point to which the subscriber connects. Given the terminating carrier's responsibility for carrying traffic from the edge, combined with its inability to charge other carriers for carrying that traffic, it makes the most sense that the edge be delineated at the point where the terminating carrier's facilities are the only ones in the call path. This definition promotes certainty and simplicity, properly aligns carriage responsibilities with the recovery of costs of fulfilling those responsibilities, and should help avoid disputes").

[29] *See, e.g*. CenturyLink Comments at 3 ("The Commission should correct this asymmetry by adopting rules permitting all tandem owners to be compensated equally for the use of their networks – thereby establishing the end office as the proper default network edge for all providers. Moreover, it should find that bill and keep should not be mandated for any tandem switching and transport services whether those services are provided in connection with traffic bound for the tandem providers' own (or affiliated) end users or to a third party (i.e. wholly unaffiliated) end users"); Coalition Comments at 3-5 (urging the FCC to refrain from imposing bill-and-keep on both intermediate carrier services or transit services); ITTA Comments at 5 ("As with ITTA's advocated definition of the network edge and as the Commission acknowledged, this would provide certainty that rural, rate-of-return LECs are not responsible for incurring costs of delivering traffic beyond their networks, and would help minimize disputes").

legacy revenue streams.[30] These actions would serve only to undermine the Commission's pro-competitive goals and further delay the IP Transition.

IV. The Safe Harbor POI Solution Would Expedite the IP Transition While Addressing Concerns of ILECs

The FCC could expedite the IP Transition and unlock a wide range of consumer benefits by adopting T-Mobile's Safe Harbor POI Solution. The Safe Harbor POI Solution would expedite the IP Transition by eliminating the incentives for certain carriers to obstruct the IP Transition.[31] First, the completion of the transition to bill-and-keep for all traffic types, combined with the Act's requirement to interconnect and exchange traffic, would reduce the incentives for carriers to resist IP-based peering arrangements. Second, the coordination of a limited number of POIs pursuant to the Safe Harbor POI Solution would permit carriers to focus resources more efficiently and expedite the optimization and modernization of their networks because they would be freed of the regulatory requirement to maintain ties to the legacy PSTN networks at every LATA. Third, the Safe Harbor POI Solution would make it easier for all carriers, including particularly the ILECs, to optimize their respective networks for the benefit of their own wholesale and retail customers. Carriers would no longer be forced to carry transit traffic, or design their networks to reflect the requirements of other carriers, solely because of a variety of

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30 *See, e.g.* ITTA Comments at 15 ("The Commission should also reverse the bill-and-keep transition for tandem switching and transport when the terminating price cap carrier also owns the tandem in the serving area"); *see also* CenturyLink Comments at 3 ("Moreover, [the FCC] should find that bill and keep should not be mandated for any tandem switching and transport services whether those services are provided in connection with traffic bound for the tandem providers' own (or affiliated) end users or to a third party (i.e. wholly unaffiliated) end users").

31 *See, e.g.*, HD Tandem Comments at 2 (agreeing that the PSTN is obsolete and outdated, and serves as an obstacle to the IP Transition); *id.* at 3 (contending that the FCC should develop a new IP-based regulatory framework); NCTA Comments at 2 (finding that current ambiguities in the rules creating financial incentives for ILECS can be remedied by rule clarification); *id.* at 6 (contending that ILECs' ability to shift transport costs to competitors serves to diminish the incentives of ILECs to migrate to more efficient IP-based arrangements); Verizon Comments at 4 (noting that revenue from high per-minute transport rates creates a disincentive to establish more efficient interconnection arrangements).

outdated regulatory mandates that were designed to introduce competition in the PSTN decades ago.

In addition to expediting the IP Transition, the Safe Harbor POI Solution would eliminate or alleviate many of today's most common arbitrage schemes.[32] If the Safe Harbor POI Solution were implemented, Legacy Carriers would no longer be able to create virtual islands that competitive carriers must pay excessive mileage, transport or termination costs to reach. Instead, all carriers would have the ability to exchange traffic originated in, or terminating to, the geographic areas served by the Safe Harbor POI, and all traffic types would be subject to bill-and-keep.

The Safe Harbor POI Solution would also improve call quality problems, particularly in rural areas, by reducing the hops used for terminating calls. The current ICC rules force carriers either to pay very high costs to terminate traffic to certain rural areas or to rely upon unnecessarily complex call paths involving multiple call hops to reduce costs.[33] To the extent carriers have less direct control over, or visibility into, each call hop, call quality becomes far harder to ensure. In short, the Safe Harbor POI Solution would eliminate the regulatory

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[32] *See, e.g.,* AT&T Comments at 2 (discussing arbitrage schemes that target non-bill-and-keep charges, such as tandem, transport and originating access charges and the urgency of preventing "billions of minutes and massive access charges"); *id.* at 3 (alleging that remote area carriers are abusing network edge rules through unscrupulous partnership practices to facilitate traffic-pumping schemes or traffic aggregation schemes); *id.* at 12-14 (explaining that mileage pumping schemes have been exacerbated by financial obligations for tariffed tandem and transport charges and the selection of transport routes); HD Tandem Comments at 4 (discussing an Iowa ILEC increasing its mileage more than ten-fold by manipulating points of interconnection with their tandem provider); ITTA Comments at 7 (contending that inconsistent application of bill-and-keep has increased opportunities for arbitrage); SDN Comments at 9 (urging the FCC to prohibit "traffic dumping"); Sprint Comments at 2 (promoting bill-and-keep as a solution to traffic pumping schemes); Verizon Comments at 4 (identifying high transport rates as an enabler of regulatory arbitrage such as access stimulation and mileage pumping); *id.* at 9 ("In Wyoming, for example, one LEC bills Verizon for 239 miles of transport to a tandem in Casper, even though there are several tandems closer than the Casper tandem.").

[33] *See, e.g.,* HD Tandem Comments at 7 (identifying "rural call completion problems" as a public policy concern that should be addressed by the FCC); Sprint Comments at 2 (offering bill-and-keep as a solution to, among other things, rural call completion issues).

requirements that permit certain parties to impose very high costs to terminate calls to rural areas, and it would increase the ability of carriers to optimize their networks and improve call quality. Consequently, call quality should improve everywhere, including rural areas, using networks that are optimized to increase call quality rather than to meet regulatory mandates or to avoid arbitrage schemes.

Finally, as explained in more detail in T-Mobile's comments, the Safe Harbor POI Solution has the following additional benefits:

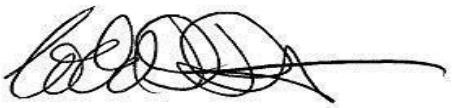
- It would not require carriers to disrupt mutually agreed upon current or future interconnection arrangements;
- It would make interconnection for ILECs more economically efficient, and provide for universal service support as needed to offset costs of connecting to the Safe Harbor POI;
- It is competitively and technologically neutral; and
- It is consistent with the requirements of the Act and the FCC's rules.[34]

[34] *See, e.g.*, T-Mobile Comments at 20-21 (describing benefits of the Safe Harbor POI Solution).

V. Conclusion

For the reasons set forth above, the record in this proceeding demonstrates that the FCC should work with the industry and the states to implement the Safe Harbor POI Solution that T-Mobile has proposed. The Safe Harbor POI Solution is the best way to jumpstart the stalled IP Transition and achieve the FCC's goals of securing the full range of associated benefits for the public.

Respectfully submitted,



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